Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte HILDE RIETHMULLER-WINZEN,
JURGEN ENGEL,
RICARDO FELBERBAUM, and
KLAUS DIEDRICH

Appeal No. 2004-2108
Application No. 09/666,146

ON BRIEF

Before WILLIAM F. SMITH, SCHEINER, and GRIMES, Administrative Patent Judges.

WILLIAM F. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1-13 and 28-31. Claims 14-27 are pending but have been withdrawn from consideration.

Claims 1 and 2 are representative of the subject matter on appeal and read as follows:

1. In the method of therapeutic management of extrauterine proliferation of endometrial tissue, chronic pelvic pain and/or fallopian tube obstruction, the improvement consisting of administration of an LHRH antagonist in the form of a short term induction treatment for a period of about 4 to 12 weeks to a patient in need of such treatment, whereby subsequently the administration of the LHRH antagonist is ceased.

2. In the method of therapeutic management of extrauterine proliferation of endometrial tissue, chronic pelvic pain and/or fallopian tube obstruction, the improvement consisting of administration of an LHRH antagonist in the form of a short term induction treatment for a period of about 4 to 12 weeks to a patient in need of such treatment, wherein the LHRH antagonist is administered in a dosage to achieve the estrogen serum concentration level between about 35 pg/ml and about 80 pg/ml, whereby subsequently the administration of the LHRH antagonist is ceased.

The references relied upon by the examiner are:

Hodgen	5,658,884	Aug. 19, 1997
Engel et al. (Engel)	5,663,145	Sep. 2, 1997

Nachtigall et al. (Nachtigall), Chapter 41 in Danforth's Obstetrics and Gynecology, Seventh Edition, pp. 757-769 (1994)

Three documents discussed by this merits panel are:

Reissmann et al. (Reissmann 1994), "Introduction of LHRH-Antagonists Into The Treatment of Gynaecological Disorders," Human Reproduction, Vol. 9, No. 5, pp. 767-769 (1994)

Reissmann et al. (Reissmann 1995), "Development and Applications of Luteinizing Hormone-Releasing Hormone Antagonists in the Treatment of Infertility: An Overview," Human Reproduction, Vol. 10, No. 8, pp. 1974-1981 (1995)

Kettel et al. (Kettel), "Rapid Regression of Uterine Leiomyomas in Response to Daily Administration of Gonadotroin-Releasing Hormone Antagonist," Fertility and Sterility, Vol. 60, No. 4, pp. 642-646 (1993)

Claims 1-13 and 28-31 stand rejected under 35 U.S.C. § 103(a). The examiner relies upon Engel, Hodgen, and Nachtigall as evidence of obviousness. We reverse.

Discussion

Claim 1 is directed to a method of therapeutic management of extrauterine proliferation of endometrial tissue, chronic pelvic pain and/fallopian tube obstruction. To this end, an LHRH antagonist is administered to a patient in need of such treatment for a period of about 4 to 12 weeks. After that treatment period, administration of the

LHRH antagonist is ceased. Claim 2 is similar to claim 1 on appeal but further requires that the LHRH antagonist is administered in a dosage to achieve an estrogen serum concentration level between about 35 pg/ml and about 80 pg/ml.

The examiner refers the reader of the Examiner's Answer to Paper No. 10 for a statement of the extant rejection. Examiner's Answer, page 3. Following the examiner's instructions, we have reviewed the statement of rejection in Paper No. 10 but find that it is not susceptible to meaningful review since the examiner has not addressed the merits of any individual claim pending. In stating the rejection in Paper No. 10, the examiner provides a brief description of each of Engel, Hodgen, and Nachtigall. The examiner has found that Engel describes a method of administering a LHRH antagonist, Cetrorelix, for the treatment of endometriosis hyperplasia. The examiner then finds that Hodgen describes a method of treating endometriosis by use of a LHRH antagonist. Finally, the examiner states that Nachtigall teaches that a compound known as Danazol, oral contraceptives, non-steroidal anti-inflammatory and analgesics are useful in treating endometriosis.

Based upon this fact finding the examiner concluded that a person of ordinary skill in the art would have found it obvious to employ "cetrorelix and other agents herein in a regimen herein to treat endometriosis." Examiner's Answer, page 4.
The examiner states that the so-called motivation to do so is because "all the agents herein are known individually to be useful in treating endometriosis." Id. The examiner concludes that "the optimization of result effect [sic] parameters (e.g., dosage ranges, dosing regimens) is obvious as being within the skill of the artisan." Id.

In reviewing the statement of the rejection, it is difficult for us to discern on what basis the examiner has concluded that the method of either independent claim 1 or independent claim 2 would have been obvious to a person of ordinary skill in the art. Claims 1 and 2 only require the administration of a LHRH antagonist for a defined time period with or without achieving a specified estrogen serum concentration. These two claims do not require any adjunctive therapy by way of further active agents such as contraceptives or analgesics. Thus, we have no clear statement from the examiner as to why the subject matter of either claim 1 or claim 2 would have been obvious to a person of ordinary skill in the art.

Furthermore, the examiner's fact finding is either incorrect or incomplete. The examiner states that Engel describes a method of administering a LHRH antagonist for treating endometrial hyperplasia. The examiner then states that all of the applied references, presumably including Engel, treat endometriosis. However, the examiner has not established that endometrial hyperplasia is in fact endometriosis or would be considered "extrauterine proliferation of endometrial tissue" as required by the claims on appeal. Thus, it is not clear on what basis the examiner considers that Engel treats endometriosis.

Furthermore, the examiner has dismissed the claim requirements in regard to the dosing schedule as being within the skill of the artisan. However, the dosing schedule required by independent claims 1 and 2 is a key part of the claimed invention and cannot be so blithely dismissed. Rather, the dosing schedule required by these claims constitutes a core factual finding that must underpin the examiner's conclusion of obviousness. As stated in In re Zurko, 258 F.3d 1379, 1385-86, 59 USPQ2d 1693,

1697 (Fed. Cir. 2001), "the Board must point to some concrete evidence in the record" to support such a finding, rather than rely upon our assessment of what is "well recognized" or what a skilled artisan would be "well aware." Nor can such facts needed to reach a conclusion of obviousness be based upon "subjective belief and unknown authority." In re Lee, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). In view of the examiner's curt dismissal of this portion of the claimed subject matter, we cannot reasonably review the rejection.

The examiner has not adequately explained how the three references relied upon in support of the rejection teach or suggest administration of an LHRH antagonist to manage extrauterine proliferation of endometrial tissue, chronic pelvic pain and/or fallopian tube obstruction for a time period of about 4 to 12 weeks. Accordingly, the examiner's rejection is reversed.

Other Issues

Reissmann 1994 discusses the use of LHRH antagonists in the treatment of gynecological disorders. Of interest is the discussion of treating endometriosis which appears on page 768. Reissmann 1994 discusses the use of LHRH agonists in treating endometriosis and how patients are normally treated for a period of 3-6 months using LHRH agonists. Reissmann 1994 contrasts that treatment with the mode of action of LHRH antagonists which might result in the relief of symptoms earlier and the treatment period being shorter. Reissmann 1995 contains similar disclosure stating in the section directed to treating endometriosis and uterine myoma "[t]he immediate suppression which is produced by the administration of a LHRH antagonist would offer advantages

in terms of reducing the duration of treatment and faster improvement of subjective symptoms (Kettel et al., 1993)" Id., page 1979.

Turning to Kettel as cited in Reissmann 1995, we find that Kettel describes treatment of uterine leiomyomas using a LHRH antagonist. Kettel states that uterine leiomyomas are associated with, inter alia, pelvic pain. Id., page 642. The patients treated in Kettel were administered a LHRH antagonist for 3 months beginning on cycle day 1 or 2. Id., page 643. Significant reduction in mean leiomyoma size was observed after one month of treatment. Id., page 644.

Focusing for the moment on independent claim 1, Reissmann 1994, Reissmann 1995, and Kettel appear to be relevant in determining the patentability of this claim. Both of the Reissmann references directly suggest the use of a LHRH antagonist to treat endometriosis with the expectation that relief of symptoms would occur earlier and the treatment period would be shortened. Since Reissmann 1994 states that the typical treatment of endometriosis with LHRH agonists is for a period of 3-6 months, it may be that a person of ordinary skill in the art reading the Reissmann references would understand that the use of a LHRH antagonist as suggested would result in the short term treatment required by claim 1 on appeal.

In any event, Kettel does describe treatment of women suffering from uterine leiomyomas with a LHRH antagonist for a period of three months, i.e., 12 weeks. Claim 1 is directed in part to treatment of "chronic pelvic pain." It is unclear from this record whether "chronic pelvic pain" as required by claim 1 on appeal includes pelvic pain described by Kettel to be associated with uterine leiomyomas. If so, it may be that Kettel anticipates claim 1 on appeal.

Turning to claim 2, we note that the estrogen serum concentration required by this claim is similar to the level achieved in Hodgen. Claim 2 requires that the estrogen serum concentration be between about 35 pg/ml and about 80 pg/ml where Hodgen suggests maintenance of estrogen level within a target zone of about 25-50 pg/ml. Hodgen, column 5, lines 29-43. Hodgen describes the advantages of maintaining such an estrogen serum concentration level at column 4, lines 8-24. By allowing this residual (basal) estrogen secretion, one avoids "the menopausal-like symptoms associated with the castrate-like estrogen level." Hodgen, column 3, line 60 - column 4, line 7.

The patients treated in the Kettel study reported hot flushes during treatment. Id., page 644. Serum levels of substances denominated "E_2" and "E_1" were measured. Id., page 644 and Figure 2. It may be that the measured levels of E_1 and E_2 bear some relationship to estrogen serum concentration levels required by claim 2 on appeal. We cannot tell from this record.

Upon return of the application, the examiner should review the Reissmann references and Kettel and determine whether they adversely affect the patentability of claims such as claims 1 and 2 on appeal. It may be that Kettel anticipates claim 1 on appeal if the pelvic pain being treated in that reference is considered "chronic pelvic pain" as required by claim 1 on appeal. Further fact finding needs to be made by the examiner in regard to the serum estrogen levels required by claim 2 and the values

reported for E_1 and E_2 in Kettel to determine whether the administration of the LHRH antagonist in that reference results in the claimed levels.

The examiner's decision is reversed.

REVERSED

William F. Smith
Administrative Patent Judge

Toni R. Scheiner
Administrative Patent Judge

Eric Grimes
Administrative Patent Judge

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